

Environmental Restoration Contract

Monthly Performance Report

July 2005

Accelerating Cleanup ...



The ERC team has removed nearly 400,000 tons of contaminated soil from the 116-K-2 Mile Long Trench located next to the Columbia River at the KE/KW reactor area. The trench received an estimated one billion gallons of cooling water during reactor operations. This project is now 95 percent complete.



Department of Energy
Richland Operations Office



Bechtel Hanford, Inc.
Environmental Restoration Contractor



CH2MHILL Hanford Inc.



**EBERLINE
SERVICES**
HANFORD, INC.

ENVIRONMENTAL RESTORATION EXECUTIVE SUMMARY

July 2005 Monthly Report

SAFETY:

As of July 31, 2005, the ERC worked approximately 70,500 hours since the last lost workday incident, which occurred on July 11, 2005 and became lost away on July 12, 2005. The ERC has experienced 84% injury-free workdays during FY05 and 74% injury-free workdays for July 2005.

FYTD: 41 first aids; 3 recordable-only; 6 lost restricted; 1 lost time
Current Month: 7 first aids; 1 lost restricted; 1 lost time

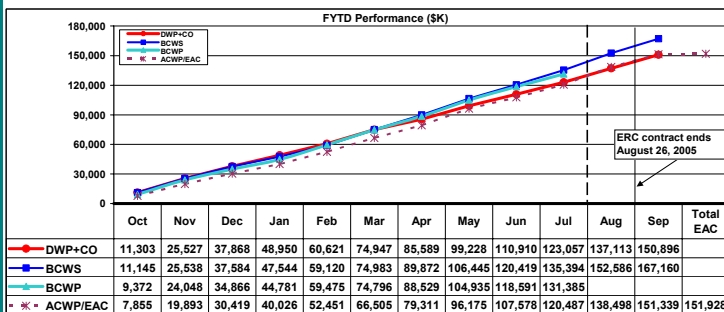
HIGHLIGHTS:

- Completed 90% of H Reactor SSE structural steel erection; overall, H Reactor ISS is 97% complete.
- Completed 1900-N After Heat Removal Water Tank demolition; initiated demolition of concrete water silo.
- Completed 313 Building loadout; initiated covering slab with gravel.
- Completed 314 Building sampling; initiated pre-demolition activities.
- Completed readiness assessment punchlist and all-hands training for 118-B-1/118-C-1 Burial Grounds restart.
- Initiated remediation activities at 126-F-2 Reservoir waste site.
- Issued RFP for 100-IU-2/100-IU-6 Remaining Sites remediation.
- Completed disposal of the first two containers of macroencapsulated drums that were retrieved from the 218-W-4C trench as part of Fluor Hanford's TRU Retrieval Project.
- RL transmitted 100-B/C Pilot Project Risk Assessment Report to the regulators on July 13, which met TPA Commitment C-16-06A.
- Meeting with RL to discuss how 618-2 Burial Ground corrective actions have been institutionalized into ERC work processes.

UPCOMING KEY ACTIVITIES:

- Initiate above-grade demolition of 183-KW chlorine vault, alum tanks, and sulfuric tanks.
- Complete characterization of 334,334A, and 303M Buildings - Sep.
- Initiate intrusive work at 118-B-1 - August.
- Award remediation subcontract for 100-IU-2/100-IU-6 Remaining Sites - September.
- Hold Trustee and stakeholder workshop to present results of the 100-B/C Pilot Risk Assessment and the 100/300 Areas SAP.
- Complete subcontracting activities to begin risk assessment field sampling by October 30, 2005, per TPA Milestone M-16-70.
- Complete FY06 Detailed Work Plans.
- Complete River Corridor Closure Contract (RCCC) transition on August 26.

PERFORMANCE:



- SV:** (\$4,009K); (3.0%). Late start on 314 Building asbestos removal/deactivation due to beryllium concerns; delay in additional ERDF office space procurement and installation; delays in restart of remediation at 100-B/C and 300 Area burial grounds; postponement of system upgrades, and delay in server room move.

- CV:** \$10,898K; 8.3%. Efficiencies achieved by truck and pup operations at B/C RPAS and Remaining Sites; 100-B/C RPAS and 118-K-1 subcontractor mobilization underruns; backfill underruns at K Area; 300 Area facility characterization/deactivation less than planned; FY04 rate rebill; and reduced estimate of retiree medical costs.

EAC TRENDS:

Current Month: (\$917K)

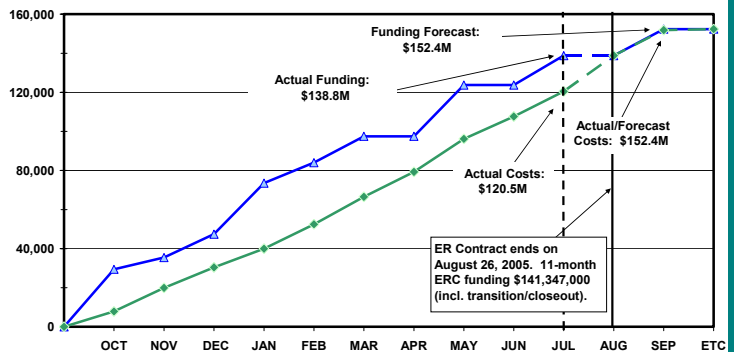
FYTD: (\$15,232K)

- Truck and pup operation efficiencies at 100-B/C.
- RPAS/118-K-1 subcontract mobilization performance.
- Backfill underruns at K Area.
- 300 Area facility characterization/deactivation less than planned.
- H Reactor gas wing demolition/loadout resources more than planned.
- FY04 rate rebill credit.
- FY04 fee less than forecast; reduced FY05 fee forecast.
- Legacy retiree medical cost less than planned.

TPA MILESTONES:

- M-93-24, Submit EE/CA for N Reactor ISS (due 9/30/06); *completed 10/14/04, nearly 2 years ahead of schedule.*
- M-16-48, Initiate Remedial Actions for 100-F Area Remaining Waste Sites (due 7/31/05); *completed 3/29/05, 4 months ahead of schedule.*
- C-16-06B, Submit Engineering Evaluation of Final Disposition of River Pipelines and Outfall Structures to Regulators (due 7/31/05); *completed 4/19/05, more than three months ahead of schedule.*
- C-16-06A, Submit B/C Risk Assessment Pilot Study to Regulators (due 7/31/05); *completed 7/13/05.*
- M-93-25, Submit an Engineering Evaluation of Final Surplus Reactor Disposition to Regulators (due 9/30/05); *completed 5/11/05, more than 4 months ahead of schedule.*
- M-93-18, Complete H Reactor ISS (due 12/31/05); *forecast 10/4/05.*

FUNDING:



PERFORMANCE INCENTIVES:

- SPI fee = 1.134 FYTD through July.
 - Complete regrade/backfill of 116-N-3 Crib/Trench by 1/1/05.
 - Complete 2 Gold Chart release sites by 3/31/05.
 - Complete excavation and loadout of 5 waste sites by 3/31/05.
- Notices of Completion were transmitted to RL for review and approval for the above three PIs.*
- Completed demolition of 313 Building; *NOC is currently being prepared.*

ISSUES:

None for this reporting period.

ENVIRONMENTAL RESTORATION FACILITIES DECOMMISSIONING PROJECT

July 2005 Monthly Report

SAFETY:

FYTD: 13 first aids; 2 recordable-only; 3 lost restricted; 0 lost workday cases; 0 skin contaminations

Current Month: 4 first aids (dust in eye, 2 strains, abrasion); 1 lost restricted (laceration)

HIGHLIGHTS:

H Reactor ISS:

- Completed 90% of structural steel erection. Received all structural steel, roofing, and siding materials.
- Poured concrete stem walls and foundations.

100-N / 100-K Areas:

- Completed characterization of 107-N ion exchange resin in T-5 Sluice Tank. Received SER from RL approving Management of Change related to radiological inventory in ion exchange resins.
- Initiated 107-N Anion Exchange Vessel removal activities.
- Completed 1900-N After Heat Removal Water Tank demolition/loadout. Initiated demolition of the concrete water silo.
- Completed characterization sampling of 183-KW chlorine vault, external alum, and chemical storage tanks; completed demolition work package.
- Completed 183.1-KW asbestos removal; completed 70% of hazardous materials removal. Initiated removal of radiologically-contaminated alum system; removed bauxite reactor vessels.

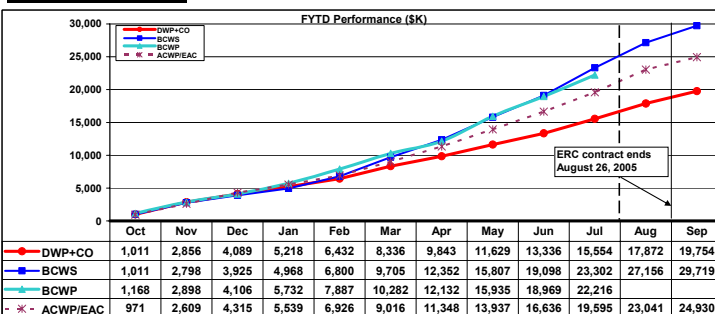
300 Area:

- Completed 313 Building loadout; initiated covering slab and adjacent areas with gravel. Pits in the slab were filled with clean soil and mounded over.
- Completed sampling of 314 Building; initiated pre-demolition activities.

UPCOMING KEY ACTIVITIES:

- Initiate H Reactor SSE roofing and siding panels.
- Complete 1900-N Water Supply Tanks demolition and regrading.
- Initiate above-grade demolition of 183-KW chlorine vault, alum tanks, and sulfuric tanks.
- Complete 313 Building walkdown with RL/regulators; submit Notice of Completion - August. Complete final report - September.
- Complete characterization of 334, 334A, and 303M Buildings - Sep.

PERFORMANCE:



- SV:** (\$1,087K); (4.7%). Late start on 314 Building asbestos removal and deactivation activities due to beryllium concerns; working overtime to recover.
- CV:** \$2,621K; 11.8%. Fewer resources utilized for accelerated 300 Area characterization than anticipated; less sampling and support utilized than planned for 100-N Area; fewer 100 Area S&M resources required than planned; partially offset by additional resources required for H Reactor gas wing demolition activities and additional thermal analysis, and more support required for 190-DR demolition activities than planned.

EAC TRENDS:

Current Month: \$123K

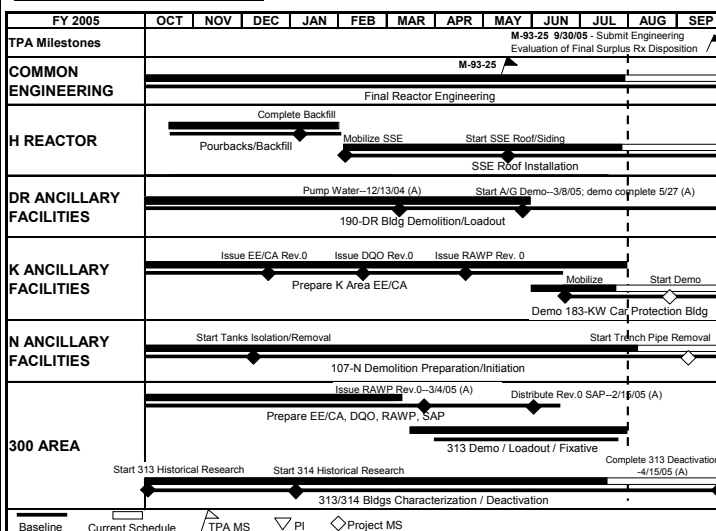
FYTD: (\$4,790K)

- 300 Area EE/CA resources and characterization/deactivation less than planned.
- 1802-N contract closeout / 1900-N sampling less than planned.
- H Reactor gas wing demolition/loadout resources more than planned.
- Fewer resources utilized for 100 Area S&M activities.

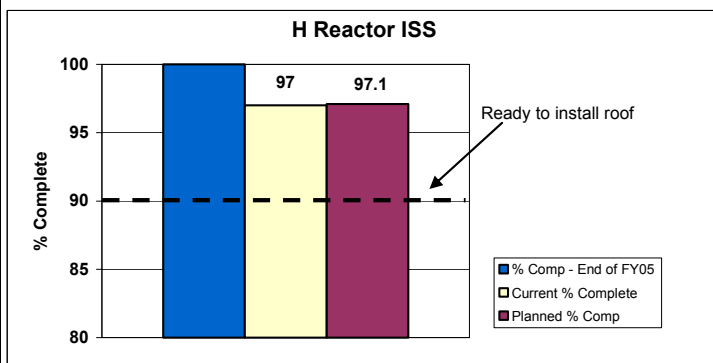
TPA MILESTONES:

- M-93-24, Submit EE/CA for N Reactor ISS (due 9/30/06); **completed 10/14/04, nearly two years ahead of schedule.**
- M-93-25, Submit an Engineering Evaluation of Final Surplus Reactor Disposition to Regulators (due 9/30/05); **complete 5/11/05, more than four months ahead of schedule. Draft A transmitted to RL on 4/27/05; RL transmitted to regulators on 5/11/05.**
- M-93-18, Complete H Reactor ISS (due 12/31/05); **forecast 10/4/05.**

SUMMARY SCHEDULE:



ISS METRIC:



ISSUES:

None for this reporting period.

ENVIRONMENTAL RESTORATION REMEDIAL ACTION PROJECT

July 2005 Monthly Report

SAFETY:

FYTD: 16 first aids; 0 recordable; 0 lost workday cases
Current Month: 1 first aid (bite/sting)

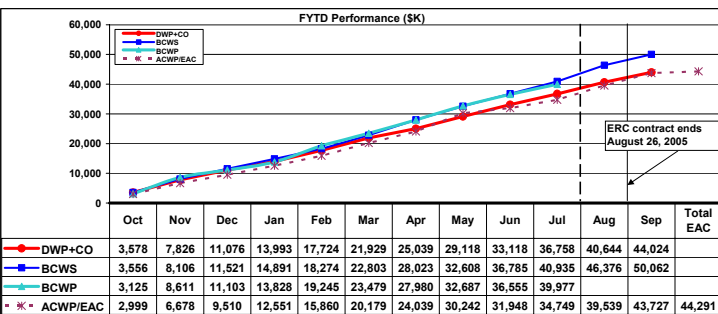
HIGHLIGHTS:

- Completed readiness assessment punchlist and all-hands training for 118-B-1/118-C-1 Burial Grounds restart.
- Continued loadout from 118-B-1 and 100-C-7 hexavalent chromium waste site. Initiated new sorting area to support 118-B-1.
- Continued excavation/stockpile/loadout at 100-B-14.
- Remediated small plumes at Horseshoe Landfill and completed confirmatory sampling; discovered more plumes.
- Completed readiness assessment and startup activities associated with 100-F Remaining Sites.
- Initiated remediation activities at 126-F-2 Reservoir waste site.
- Continued remediation activities for the 116-K-2 Mile Long Trench.
- Issued RFP for 100-IU-2 and 100-IU-6 Remaining Sites remediation.
- Continued excavation of 116-N-1 Crib, Trench, and contaminated surface areas.
- Completed loadout of 300 Vittrification Test Site (300-VTS) and 316-4 Crib.
- Completed 600-259 Lysimeter Site loadout; possibility of a trace of tritium found in the final sampling is being evaluated.
- Held the 300 Area readiness review dryrun on July 28.
- Issued four approved RSVPs (100-B-16, 100-D-50:10, 100-F-26:1, and 100-F-26:5).
- Issued 128-C-1 Draft A RSVP for RL/regulator review.
- Issued approved 116-KE-4 CVP.
- Completed sampling of five 100-D Area confirmatory sites.
- Completed 100-D Burial Grounds and RTD Remaining Sites preliminary design review.

UPCOMING KEY ACTIVITIES:

- Initiate intrusive work at 118-B-1 - August.
- Evaluate Horseshoe Landfill data and determine path forward - August.
- Initiate backfill of 116-KE-4 Retention Basin and 100-KW-55 effluent pipelines - August.
- Award remediation subcontract for 100-IU-2/100-IU-6 Remaining Sites - September.
- Begin excavation of 116-N-1 Crib plumes - August.
- Initiate stockpile loadout in 618-8 Burial Grounds - August.

PERFORMANCE:



- SV:** (\$958K); (2.3%). Delays in restart of remediation at 118-B-1 and 118-C-1 Burial Grounds and 300 Area Burial Grounds 618-3 and 618-8; K Area backfill behind schedule pending BCP approval to delete overstated quantities; partially offset by accelerated excavation and loadout at 100-B/C Remaining Sites, RPAS sites, and Horseshoe Landfill.
- CV:** \$5,228K; 13.1%. Loadout efficiencies achieved by truck and pup operations at B/C RPAS and Remaining Sites; backfill underruns at K Area; 100-B/C RPAS and 118-K-1 subcontract mobilization performance better than DWP; labor underruns throughout all RA sites due to resource limitations; reversal of FY04 100-NR overstated accrual; 116-C-3 analytical efficiencies.

EAC TRENDS:

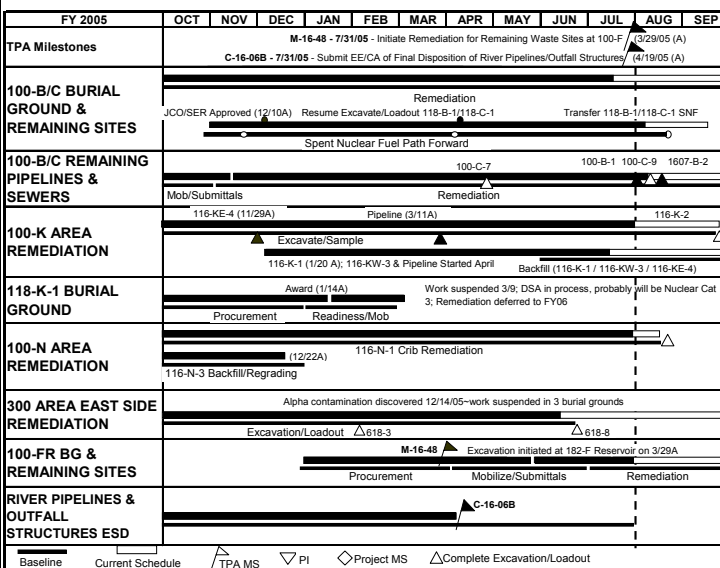
Current Month: (\$365K)
FYTD: (\$5,771K)

- Truck and pup efficiencies at B/C Remaining Sites and RPAS Site 100-B-1; backfill underruns at K Area; RPAS and 118-K-1 subcontract mobilization performance better than DWP; reversal of FY04 100-NR overstated accrual; labor underruns; 116-C-3 field sampling and analytical efficiencies.

TPA MILESTONES/COMMITMENTS:

- M-16-48**, Initiate Remedial Actions for 100-F Area Remaining Waste Sites (due 7/31/05); *complete 3/29/05, 4 months ahead of schedule.*
- C-16-06B**, Submit Engineering Evaluation of Final Disposition of River Pipelines and Outfall Structures to Regulators (due 7/31/05); *complete - ESD (Draft A) was transmitted to RL on 4/7/05; RL forwarded to regulators on 4/19/05.*

SUMMARY SCHEDULE:



ISSUES:

None for this reporting period.

ENVIRONMENTAL RESTORATION WASTE OPERATIONS PROJECT

July 2005 Monthly Report

SAFETY:

- FYTD: 7 first aids; 1 recordable-only; 3 lost restricted; 1 lost time
- Current Month: 1 lost time (fracture)

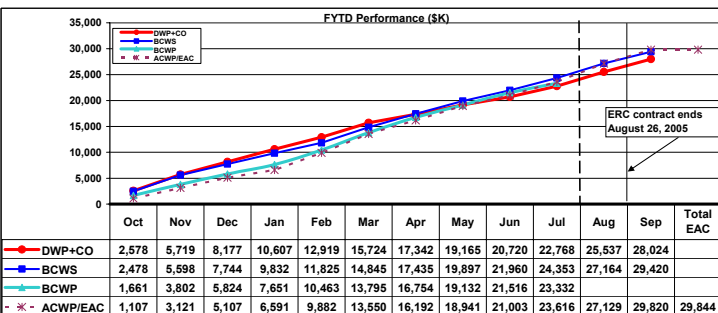
HIGHLIGHTS:

- Received 63,718 tons of waste at ERDF during July; 876,646 tons during FY05; 5,952,369 tons of contaminated material have been disposed in ERDF since operations began in July 1996.
- Suspended operations on 13 separate days due to inclement weather.
- Receipt of beryllium-contaminated waste from 313 Building demolition was completed in July.
- Completed foundation work for new office.
- Analytical results from recent bench scale treatment test of chromium-contaminated waste from 100-C-7 indicate that the treated waste will meet the appropriate regulatory standards. Test results and treatment plan will be forwarded to EPA for approval.
- Completed waste profile and surveillance for K-Basin canisters waste streams. Approvals are in place for waste shipments.
- Disposal of the first two containers of macroencapsulated drums from PECOS into ERDF occurred on July 7. Total of 80 drums that were retrieved from the 218-W-4C trench as part of Fluor Hanford's TRU Retrieval Project were super-compacted and grouted within the containers at PECOS and then transported to ERDF for disposal.

UPCOMING KEY ACTIVITIES:

- Set up lysimeter sampling and analysis for ERDF Cells 5 and 6.
- Begin treatment test on waste from the Effluent Treatment Facility (ETF). Testing will be delayed until waste is available from ETF in mid-August.
- Complete Waste Operations office building.

PERFORMANCE:



- SV:** (\$1,021K); (4.2%). Delay in additional ERDF office space procurement and installation; delays in transportation and disposal; remaining macroencapsulation scope deferred to FY06 (BCP submitted for deferred scope).
- CV:** (\$284K); (1.2%). Increased cost for leased trucks and dump truck and pup operations; increased container costs; partially offset by labor underruns in direct project support and transportation/disposal.

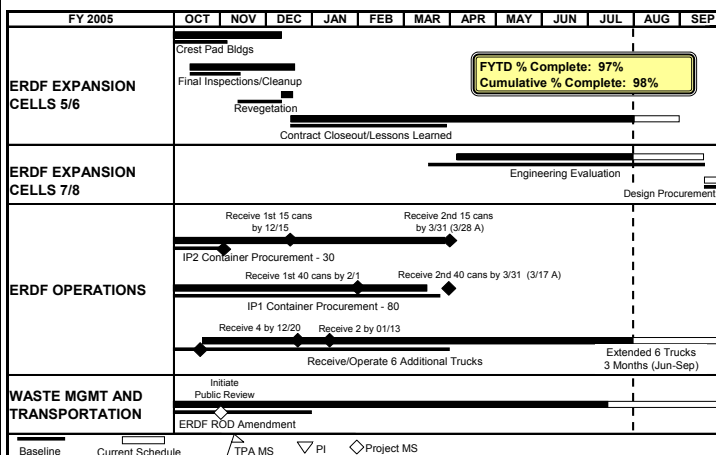
EAC TRENDS:

Current Month: (\$363K)

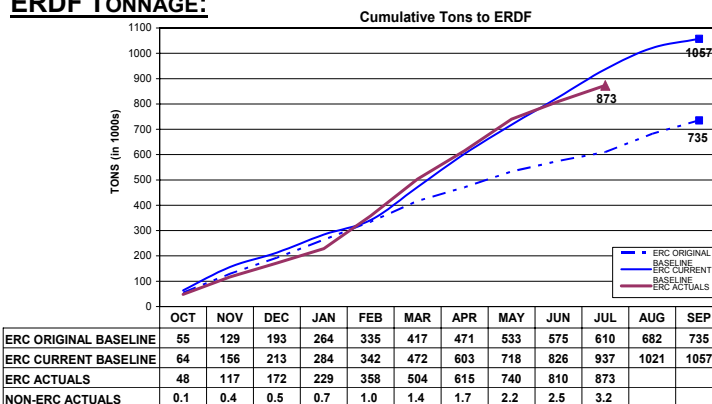
FYTD: \$424K

- Increased cost to support trucks and pups campaign (offset by Remedial Actions savings).
- Increased cost for beryllium waste disposal.
- Decrease in direct project support.

SUMMARY SCHEDULE:



ERDF TONNAGE:



ISSUES:

None for this reporting period.

ENVIRONMENTAL RESTORATION RISK ASSESSMENT / SITE CLOSURE PROJECT

July 2005 Monthly Report

SAFETY:

No first aid, recordable, or lost workday cases experienced FYTD.

HIGHLIGHTS:

100-B/C Pilot:

- RL transmitted *100-B/C Pilot Project Risk Assessment Report* to the regulators on July 13, which met TPA Commitment C-16-06A.

100/300 Area:

- Transmitted *100 Area and 300 Area Component of River Corridor Baseline Risk Assessment (RCBRA) Sampling and Analysis Plan (SAP)* (DOE/RL-2005-42, Draft A) to RL on June 23. Comments from the regulators, Tribes, Trustees, and stakeholders are due on August 15; preliminary (informal) comments were received from Ecology on August 1.
- Prepared a *Sampling and Analysis Instruction Guide for the 100 Area and 300 Area Component of the RCBRA* (BHI-01790) that describes required field sampling collection activities. It is in internal review.
- Continuation of shoreline conductivity surveys are still impacted by high river flow. Surveys will resume when flow is below 80,000 cubic feet per second.
- Received Tri-Party approval of *River Corridor Baseline Risk Assessment Stack Air Emissions Deposition Scoping Document* (DOE/RL-2005-49, Rev. 0); sent to RL for official distribution. It was also posted on the project Web page.
- Posted a Request for Interest on the ERC contracting Web page as the first step in finding a subcontractor for FY06 sampling activities.

Columbia River Component:

- Held the 8th workshop on Existing Data Compilation/Evaluation on July 19 with RL, EPA, Ecology, Tribes, Trustees, and stakeholders to elicit feedback.

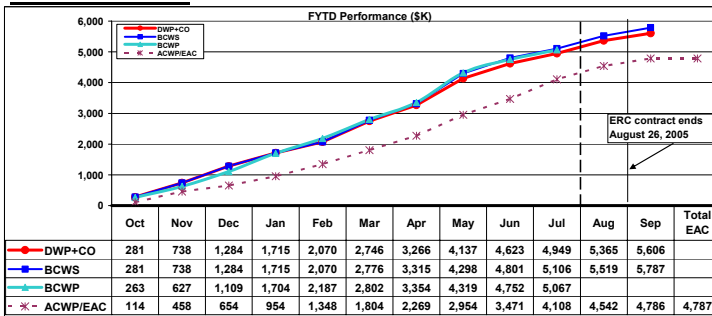
Closure Activities:

- Completed the final field investigations for 100-F (including ground penetrating radar measurements) on July 28.
- At the July Unit Managers Meeting, the regulators agreed to exclude surface debris and/or minor soil stains as orphan waste sites inputs to WIDS. The Remedial Action Project will work with the regulators to implement modified Waste Control Plans to include removal of surface debris identified during the Orphan Site Evaluations (OSE). Once implemented, this OSE process improvement will replace the use of the WIDS/ESD (ROD) process to document the cleanup of hazardous and/or dangerous surface debris.

UPCOMING KEY ACTIVITIES:

- Hold workshop on August 9-10 with Trustees and stakeholders to present results of the 100-B/C Pilot Risk Assessment and the 100/300 Areas SAP.
- Respond to comments on the 100/300 Areas SAP and complete document for regulatory approval.
- Complete 100 Area and 300 Area conductivity survey.
- Complete Tribal plant sampling report for the 100 Area and 300 Area.
- Complete subcontracting activities to begin field sampling by October 30, 2005, per TPA Milestone M-16-70.
- Conduct focused working session with RL, ORP, EPA, Ecology, Tribes, Trustees, and stakeholders for the Hanford Site Risk Assessment Integration Strategy and Schedule (HSRAIS) task on August 4.
- Complete documentation of orphan waste sites for 100-FR-1/2 OUs.
- Meet with RL Project Managers to review 100-F orphan waste sites.
- Meet with 100 Area RA Project, RL, and regulators for "No Action" reclassification approvals for 300-FF-1 WIDS reclassification forms for Coal Ash Ditch and Coal Ash Process Sewer pipelines.

PERFORMANCE:



- SV:** (\$38K); (0.8%). Completion of FY05 geotechnical activities. Hanford Site-wide risk integration activities completed. Columbia River Component Risk Assessment Work Plan put on hold until FY06 per RL direction.
- CV:** \$959K; 18.9%. Efficiencies realized in performing peer review of human scenarios, DQO development, and reconnaissance sampling. Positive variance to date will be eroded slightly by FY-end based on workscope remaining to be completed.

EAC TRENDS:

Current Month: (\$29K)

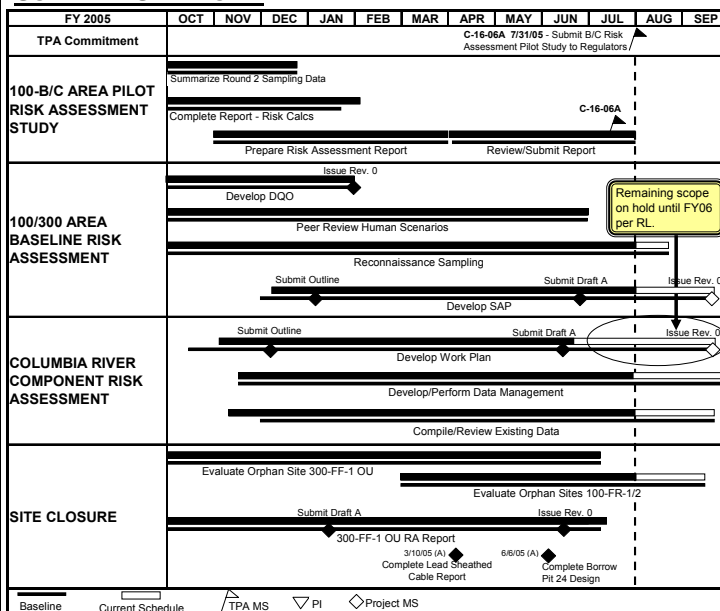
FYTD: (\$1,000K)

- Efficiencies realized in performing peer review of human scenarios, DQO development, and reconnaissance sampling. Efficiencies will result in a positive variance at completion and have been reflected in the EAC.

TPA COMMITMENTS:

C-16-06A, Submit B/C Risk Assessment Pilot Study to Regulators (due 7/31/05); *Completed - transmitted report to RL on 6/24/05; RL transmitted to regulators on July 13.*

SUMMARY SCHEDULE:



ISSUES:

None for this reporting period.

ENVIRONMENTAL RESTORATION MISSION SUPPORT

July 2005 Monthly Report

SAFETY:

FYTD: 5 first aids; 0 recordable-only; 0 lost workday cases
Current Month: 2 first aids (contusion, paper cut)

HIGHLIGHTS:

Safety and Health:

- Conducted Hazard Recognition Training for 9 supervisors and 26 craft from Remedial Action and Facilities Decommissioning Projects.
- Tabulated results from the June safety survey. The overall level of satisfaction with the ES&H Program implementation rose from 4.08 to 4.17 (on a scale of 1-5).
- Issued the ORPS Quarterly Performance Analysis Report.
- Upgraded the Industrial Hygiene Technical Training Program modules.
- Completed 200 of 219 planned items that are required by the ERC to support transition to the River Corridor Closure Contract (RCCC).
- Developed a remote dose rate reading instrument designed to reduce employee exposure during radiological surveys.

Technical Services:

- Completed all corrective actions to support 618-2 Burial Ground activities (effort required participation by multiple ERC project and functional organizations). Meeting with RL to discuss how corrective actions have been institutionalized into ERC work processes, and to present copies of all corrective actions to RL.
- Provided functional support to projects for readiness assessments to ensure corrective actions from 618-2 Burial Ground were fully incorporated into startup of field remediation.
- Issued Technical Services directive to engineering staff on required training to new and revised authorization basis documents.
- Completed revision to the Hazard Index Document which identifies current hazard categorization and authorization basis documents for the ERC.
- Provided sample/data management support – collected 1,456 samples, issued 5 sample authorization forms (SAFs), issued 16 sample disposition records (SDRs), and validated 6 data packages.

Business Services:

- Completed audit of Eberline Analytical Services Laboratory, Lionville, PA. Laboratory is developing corrective action plan for observed findings.
- Completed independent assessment of the ERC Emergency Management Program. Several corrective actions were corrected immediately; corrective action plan is being developed for remaining corrective action requests (CARs).

UPCOMING KEY ACTIVITIES:

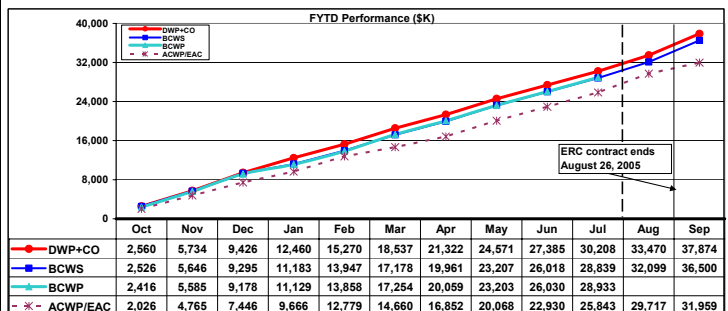
- Conduct annual Nuclear Criticality assessment – August.
- Complete remaining planned activities in the ERC Transition Plan that are required to support transition to RCCC – August.
- Meet with RL to discuss 618-2 Burial Ground corrective actions – August.

ASSESSMENTS:

FY 2005 ERC Assessment Data											
Assessments	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Scheduled	17	24	22	25	20	24	21	20	25	20	25
Scheduled / Performed	14	18	18	20	16	19	18	16	19	17	
Past Due Completed	4	0	5	3	4	3	3	2	5	4	
Unscheduled / Performed	3	5	5	3	4	3	2	1	5	1	
Total Performed	21	23	28	26	24	25	23	19	29	22	

No significant findings during this reporting period.

PERFORMANCE:



- SV:** \$94K; 0.3%. Insignificant.
- CV:** \$3,089K; 10.7%
 - FY04 rate rebill credit.
 - Retiree medical cost less than planned.
 - Labor efficiencies in Safety & Health.

EAC TRENDS:

Current Month: \$54K

FYTD: (\$4,540K)

- FY04 rate rebill credit.
- Reduced FY05 fee forecast.
- FY04 fee less than forecast.
- Legacy retiree medical cost less than planned.
- Labor efficiencies in Safety and Health.

ISSUES:

None for this reporting period.

ENVIRONMENTAL RESTORATION GENERAL SUPPORT July 2005 Monthly Report

SAFETY:

FYTD: 0 first aids; 0 recordable-only; 0 lost workday cases

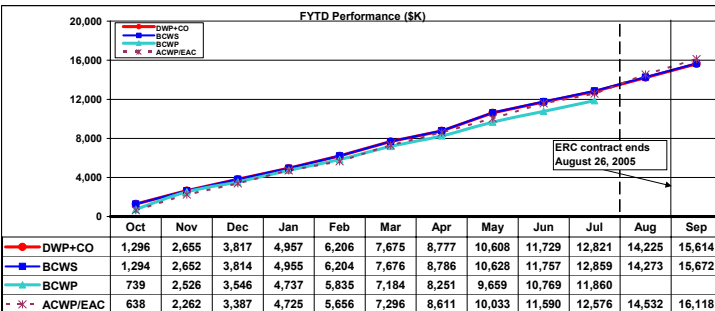
HIGHLIGHTS:

- Completed the construction of the new server room in Hanford Square IV. This included the construction of the room, fire system installation, design modifications, UPS installation, and HVAC installation.
- Completed the installation of an universal access control system for Hanford Square II, III, and IV.
- Continued the Detailed Work Plan preparation.
- Prepared the payroll system for transition.

UPCOMING KEY ACTIVITIES:

- Complete FY06 DWP planning.
- Complete RCCC transition.
- Complete move of servers from 3350 George Washington Way to Hanford Square IV.

PERFORMANCE:



- SV:** (\$999K); (7.8%). Postponement of system upgrades; server room move.
- CV:** (\$716K); (6.0%). Overrun due to transition costs in Information Systems and Facilities, and more leased vehicles than planned.

EAC TRENDS:

Current Month: (\$337K)

FYTD: \$446K

- More leased vehicles than planned.

CONTRACT METRIC:

	Goal	FYTD	Jul 05
Small Business	50.0%	65.7%	43.3%
Disadvantaged	6.5%	10.2%	4.4%
Woman-Owned	2.5%	3.4%	6.7%
Veteran-Owned	0.02%	0.99%	2.77%
SD Veteran-Owned	0.02%	0.12%	0.00%
Hubzone Certified	0.05%	1.72%	0.76%

Total P-Cards for July: \$ 433,503 (405 actions)

Total July Commitments: \$ 5,386,083 (52 actions)

Total FY05 Commitments: \$62,046,412

ISSUES:

None for this reporting period.